Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Dasarahalli Division

Name of Work:Improvements and Ashalting to Chikkasandra main road from Hesaraghatta main road to Vigneswara layout in ward No-12, Shettyhalli Sub Division

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Civil Work								
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications 10km lead= 57+2.0x1.28x10 =82.60								
	CC Drain								
	4th Cross	2	61.00	1.20	0.90	131.76			
	Cross Road-1	2	63.00	1.20	0.90	136.08			
	2nd Cross	2	114.00	1.20	0.90	246.24			
	Cross Road-2	2	60.00	1.20	0.90	129.60			
	Cross Road-3	2	60.00	1.20	0.90	129.60			
	Cross Road-4	2	60.00	1.20	0.90	129.60			
	frm Sapthagiri Main Road								
	RHS 3rd Crs Sapthagiri Main	2	120.00	1.20	0.90	259.20			
	4th Crss frm Sapthagiri Main	2	120.00	1.20	0.90	259.20			
	Cross Road-1 frm 4th Cross	2	33.50	1.20	0.90	72.36			
	Cross Road-2 frm 4th Cross	2	32.50	1.20	0.90	70.20			
	5th Cross frmSapthagiri Mn	2	135.00	1.20	0.90	291.60			
	6th Cross frmSapthagiri Mn	2	134.00	1.20	0.90	289.44			
	8th Cross frmSapthagiri Mn	2	92.00	1.20	0.90	198.72			
	Sapthagiri Colg Mn Rd Frm Bairalingappa Road	1	85.00	1.20	0.90	91.80			
						2435.40	**Cum**	**220.40**	**536762.16**
2	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
	CC Drain								
	4th Cross	2	61.00	1.20	0.15	21.96			
	Cross Road-1	2	63.00	1.20	0.15	22.68			
	2nd Cross	2	114.00	1.20	0.15	41.04			
	Cross Road-2	2	60.00	1.20	0.15	21.60			
	Cross Road-3	2	60.00	1.20	0.15	21.60			
	Cross Road-4	2	60.00	1.20	0.15	21.60			
	frm Sapthagiri Main Road								
	RHS 3rd Crs Sapthagiri Main	2	120.00	1.20	0.15	43.20			
	4th Crss frm Sapthagiri Main	2	120.00	1.20	0.15	43.20			
	Cross Road-1 frm 4th Cross	2	33.50	1.20	0.15	12.06			
	Cross Road-2 frm 4th Cross	2	32.50	1.20	0.15	11.70			
	5th Cross frmSapthagiri Mn	2	135.00	1.20	0.15	48.60			
	6th Cross frmSapthagiri Mn	2	134.00	1.20	0.15	48.24			
	8th Cross frmSapthagiri Mn	2	92.00	1.20	0.15	33.12			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Sapthagiri Colg Mn Rd Frm Bairalingappa Road	1	85.00	1.20	0.15	15.30			
						405.90	Cum	5421.90	2200749.21
3	Providing and laying **plain/reinforced cement concrete for side drains using M20** nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm (I No-37.59.2,P No-271)								
	CC Drain Raft								
	4th Cross	2	61.00	0.90	0.15	16.47			
	Cross Road-1	2	63.00	0.90	0.15	17.01			
	2nd Cross	2	114.00	0.90	0.15	30.78			
	Cross Road-2	2	60.00	0.90	0.15	16.20			
	Cross Road-3	2	60.00	0.90	0.15	16.20			
	Cross Road-4	2	60.00	0.90	0.15	16.20			
	frm Sapthagiri Main Road								
	RHS 3rd Crs Sapthagiri Main	2	120.00	0.90	0.15	32.40			
	4th Crss frm Sapthagiri Main	2	120.00	0.90	0.15	32.40			
	Cross Road-1 frm 4th Cross	2	33.50	0.90	0.15	9.05			
	Cross Road-2 frm 4th Cross	2	32.50	0.90	0.15	8.78			
	5th Cross frmSapthagiri Mn	2	135.00	0.90	0.15	36.45			
	6th Cross frmSapthagiri Mn	2	134.00	0.90	0.15	36.18			
	8th Cross frmSapthagiri Mn	2	92.00	0.90	0.15	24.84			
	Sapthagiri Colg Mn Rd Frm Bairalingappa Road	1	85.00	0.90	0.15	11.48			
	CC Drain Wall								
	4th Cross	4	61.00	0.15	0.60	21.96			
	Cross Road-1	4	63.00	0.15	0.60	22.68			
	2nd Cross	4	114.00	0.15	0.60	41.04			
	Cross Road-2	4	60.00	0.15	0.60	21.60			
	Cross Road-3	4	60.00	0.15	0.60	21.60			
	Cross Road-4	4	60.00	0.15	0.60	21.60			
	frm Sapthagiri Main Road								
	RHS 3rd Crs Sapthagiri Main	4	120.00	0.15	0.60	43.20			
	4th Crss frm Sapthagiri Main	4	120.00	0.15	0.60	43.20			
	Cross Road-1 frm 4th Cross	4	33.50	0.15	0.60	12.06			
	Cross Road-2 frm 4th Cross	4	32.50	0.15	0.60	11.70			
	5th Cross frmSapthagiri Mn	4	135.00	0.15	0.60	48.60			
	6th Cross frmSapthagiri Mn	4	134.00	0.15	0.60	48.24			
	8th Cross frmSapthagiri Mn	4	92.00	0.15	0.60	33.12			
	Sapthagiri Colg Mn Rd Frm Bairalingappa Road	2	85.00	0.15	0.60	15.30			
						710.33	Cum	7070.20	5022139.82
4	KSRB 4.9.2 : Providing **T.M.T steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM complete as per specifications. Specificatio(I No-28.8.2,P No-229)								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Consider 75kg/Cum	1	710.33	75.00		53274.38			
						53.27	Tn	72326.98	3853174.66
5	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	CC Drain Top Covering Slab								
	4th Cross	2	61.00	0.90		109.80			
	Cross Road-1	2	63.00	0.90		113.40			
	2nd Cross	2	114.00	0.90		205.20			
	Cross Road-2	2	60.00	0.90		108.00			
	Cross Road-3	2	60.00	0.90		108.00			
	Cross Road-4	2	60.00	0.90		108.00			
	frm Sapthagiri Main Road								
	RHS 3rd Crs Sapthagiri Main	2	120.00	0.90		216.00			
	4th Crss frm Sapthagiri Main	2	120.00	0.90		216.00			
	Cross Road-1 frm 4th Cross	2	33.50	0.90		60.30			
	Cross Road-2 frm 4th Cross	2	32.50	0.90		58.50			
	5th Cross frmSapthagiri Mn	2	135.00	0.90		243.00			
	6th Cross frmSapthagiri Mn	2	134.00	0.90		241.20			
	8th Cross frmSapthagiri Mn	2	92.00	0.90		165.60			
	Sapthagiri Colg Mn Rd Frm Bairalingappa Road	1	61.00	0.90		54.90			
						2007.90	Sqm	2208.00	4433443.20
6	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
	Culvert Top Slab	2	4.00	1.20		9.60			
						9.60	Sqm	5241.00	50,313.60
7	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00	0.25	132.00			
						132.00	Cum	69.06	9,115.92
8	KSRRB 300-58. **Compaction of original ground** by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications (I No-19.64,P No-147)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00		528.00			
						528.00	Sqm	6.36	3,358.08
9	Construction of **granular sub-base Grading-V** as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00	0.15	79.20			
						79.20	Cum	1994.92	157997.66

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
10	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap / basalt to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications(P.No-155,I No-20.18)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00	0.225	118.80			
						118.80	**Cum**	**2001.28**	**237752.06**
11	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications Clause 502 of MORTH V revision(P.No-158,I No-21.6)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00		528.00			
						528.00	**Sqm**	**29.68**	**15,671.04**
12	KSRRB 500-7. Providing and **applying tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM complete as per specifications (P.No-161,I No-21.7)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00		528.00			
						528.00	**Sqm**	**12.72**	**6,716.16**
13	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 505 of MORTH V revisionusing 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No-160,I No-21.17.6)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00	0.05	26.40			
						26.40	**Cum**	**6858.20**	**181056.48**
14	KSRRB M500-19. Providing and laying **bituminous concrete** using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications Clause 507 of MORTH V revision using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 5.4% VG-30 Bitumen(P.No-162,I No-21.22.6)								
	4th Crs frm Sapthagiri Mn	1	88.00	6.00	0.03	15.84			
						15.84	**Cum**	**7911.84**	**125323.55**
15	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface/ Concrete Surface: Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 standards specified. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No-182,I No-24.15)								
	4th Crs frm Sapthagiri Mn	2	88.00	0.10		17.60			
						17.60	**Sqm**	**454.74**	**8,003.42**
								Total Construction Cost	**16841577.02**
								Towards GST 12%	**2020989.24**
								Towards KRIDL Charges 4.5%	**757870.97**

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
						370514.69		DPR & PMC Cost	337551.35
						19990951.92		Sub Total	19999917.31
						9048.08		Utility Shifting,Miscellaneous and Rounding off	82.69
								GRAND TOTAL	20000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017.and Data Rates

SILICON CONSULTING ENGINEERS

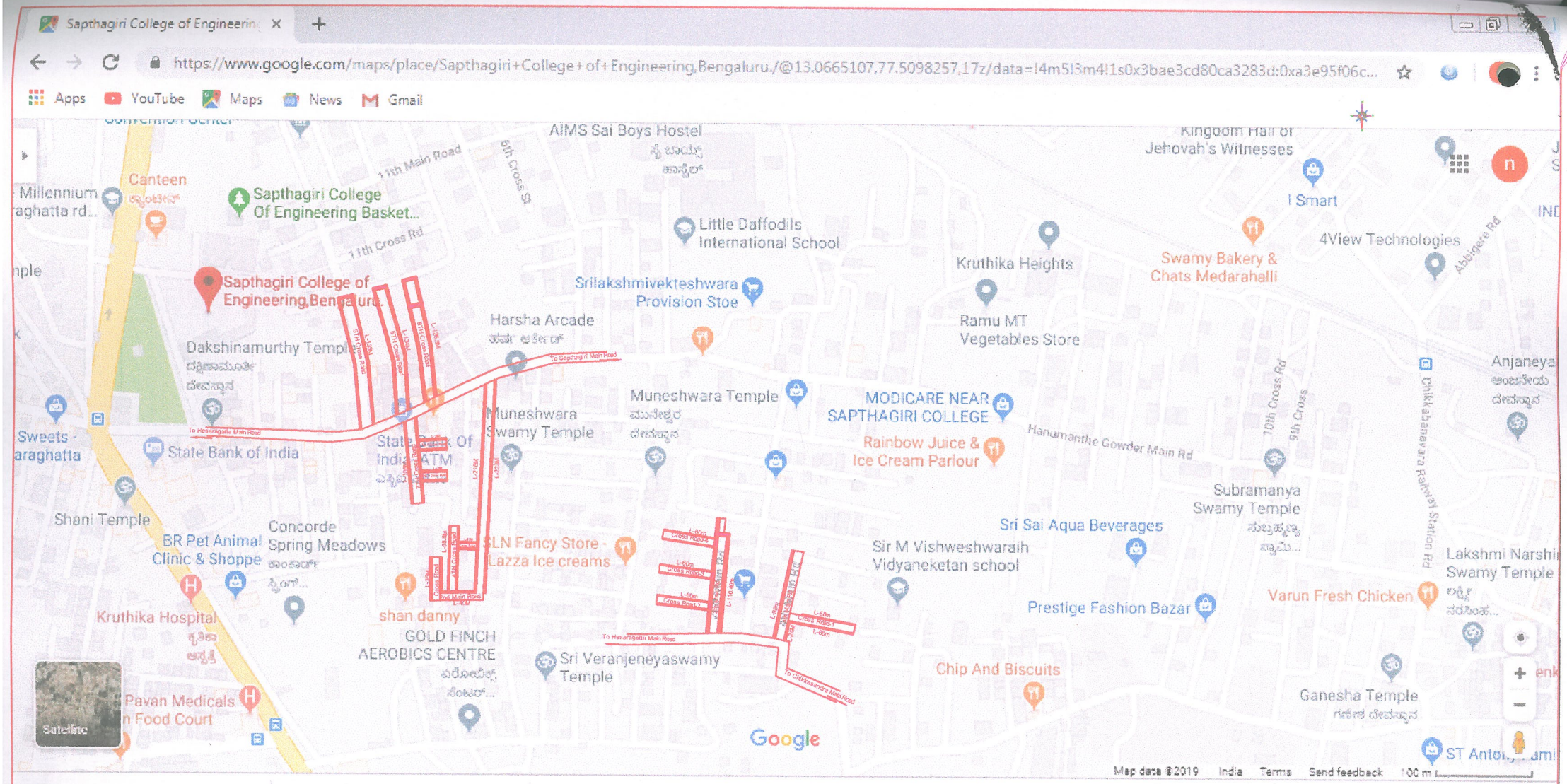
Assistant Engineer
Ward No-12
BBMP Bangalore

Asst. Executive Engineer,
Shettyhalli Sub Division
BBMP Bangalore

Executive Engineer,
Dasarahalli Division
BBMP Bangalore

ನಂ. EE/AS/169/18-19 ದಿನಾಂಕ : 20.02.2019
ರೂ. 200000000 =00 (Two Hundred Lakhs Only)
ಅಂದಾಜು ಪಟ್ಟಿಗೆ ಆಡಳಿತಾತ್ಮಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ.ದಾಸರಹಳ್ಳಿ ವಿಭಾಗ
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬೆಂಗಳೂರು.

ನಂ. CE/02/TS/195/18-19 ದಿನಾಂಕ : 22/02/2019
ರೂ. 200.00 lakhs/- (Rs. Two Hundred lakhs only)
ಗಳ ಅಂದಾಜು ಪಟ್ಟಿಗೆ ತಾಂತ್ರಿಕ ಮಂಜೂರಾತಿ ನೀಡಿದೆ.
ತಾಂತ್ರಿಕ ಸಹಾಯಕರು
ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಬಿ.ಬಿ.ಎಂ.ಪಿ.
ದಾಸರಹಳ್ಳಿ ವಲಯ, ಬೆಂಗಳೂರು.



LIENT: RUHAT BANGALORE MAHANAGARA PALIKE	PROJECT Improvements and Asphalting to Chikkasandra Main road and from Hesaragatta Main road to Vigneswara layout in ward no 12, Shettyhalli Sub Division	Dwg Title: PLAN	Culvert RCC Drain

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ
ಎಸ್.ಎಂ. ರಸ್ತೆ, ರವೀಂದ್ರನಗರ, ಬೆಂಗಳೂರು